

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method of regulating an average rate of transmission on a computer network employing TCP, comprising ~~the steps of:~~
 - determining an amount of available space in a receive buffer; ~~[[and]]~~
 - ~~removing~~ reading data from the receive buffer such that the amount of available space in the receive buffer is maintained at a regulated value; and
 - regulating a rate at which data is delivered to the receive buffer based on priority of the data.
2. (currently amended) The method of claim 1, wherein ~~the step of removing~~ reading data ~~includes~~ comprises regulating ~~[[the]]~~ a frequency at which data is read from the receive buffer.
3. (currently amended) The method of claim 1, wherein ~~the step of removing~~ reading data ~~includes~~ comprises regulating ~~[[the]]~~ an amount of data read during each read from the receive buffer.
4. (original) The method of claim 1, wherein a receiver measures an actual transfer rate.
5. (currently amended) The method of claim 1, wherein ~~the step of~~ determining an amount of available space in a receive buffer is performed by a rate control module located on a receiver.
6. (original) The method of claim 5, wherein the rate control module operates above a TCP layer and communicates with the TCP layer via a TCP application programming interface.

7. (original) The method of claim 1, wherein the average rate of transmission is regulated to an extent sufficient to reduce the effect that a transmission has on another transmission in the computer network.
8. (currently amended) The method of claim 1, wherein ~~the step of~~ removing data comprises using a determined frequency of lost packets.
9. (currently amended) A method of regulating an average rate of transmission on a computer network employing TCP, comprising ~~the steps of~~:
- determining an amount of available space in a receive buffer; [[and]]
 - regulating an available space in the receive buffer by regulating a size of the receive buffer; and
 - regulating a rate at which data is delivered to the receive buffer based on priority of the data.
10. (original) The method of claim 9, wherein a receiver determines an actual transfer rate.
11. (currently amended) The method of claim 9, wherein ~~the step of~~ determining an amount of available space in a receive buffer is performed by a rate control module located on a receiver.
12. (original) The method of claim 11, wherein the rate control module operates above a TCP layer and communicates with the TCP layer via a standard TCP application programming interface.
13. (original) The method of claim 9, wherein the average rate of transmission is reduced.

14. (currently amended) The method of claim 13, wherein the reduction in average rate of transmission is sufficient to reduce ~~[[the]]~~ an effect that a transmission has on ~~an other~~ another transmission in the computer network.
15. (currently amended) The method of claim 9, wherein ~~the step of~~ reducing the receive buffer size comprises using ~~uses~~ a determined frequency of lost packets.
16. (currently amended) A system for regulating an average rate of transmission on a computer network, comprising:
- a receive buffer located on a receiver; ~~[[and]]~~
 - a rate control module ~~operable~~ configured to determine available space in the receive buffer and to regulate a rate at which data is ~~removed~~ read from the receive buffer, such that the amount of available space in the receive buffer is maintained at a regulated value and;
 - a transfer management module configured to regulate the rate at which data is delivered to the receive buffer based on priority of the data.
17. (currently amended) The system of claim 16, wherein the rate control module regulates the rate at which data is ~~removed~~ read by varying ~~[[the]]~~ a frequency at which data is read from the receive buffer.
18. (currently amended) The system of claim 16, wherein the rate control module regulates the rate at which data is ~~removed~~ read by varying ~~[[the]]~~ an amount of data read during each read from the receive buffer.
19. (original) The system of claim 16, wherein the rate control module operates above a TCP layer and communicates with the TCP layer via a standard TCP application programming interface.

20. (original) The system of claim 19, wherein the rate control module operates between the TCP layer and an FTP/HTTP layer.
21. (currently amended) The system of claim 19, wherein the rate control module is integrated into ~~[[a]]~~ an FTP/HTTP layer.
22. (original) The system of claim 16, wherein the average rate of transmission is reduced.
23. (currently amended) The system of claim 22, wherein the reduction in average rate of transmission is sufficient to reduce ~~[[the]]~~ an effect that a transmission has on another transmission.
24. (original) The system of claim 16, wherein the regulation of a rate at which data is removed is a function of a determined frequency of lost packets.
25. (currently amended) A system for transmitting data over a computer network employing TCP, comprising:
- a sender;
 - a receiver;
 - a receive buffer ~~located on~~ coupled to the receiver; ~~[[and]]~~
 - a rate control module configured to regulate an amount of space available in the receive buffer to influence an average rate that data is read from the receive buffer and transferred from the sender to the receiver; and
 - a transfer management module configured to regulate communication between the sender and receiver based on priority of the data.

26. (currently amended) The system of claim 25, wherein the rate control module regulates the amount of space available in the receive buffer by varying ~~[[the]]~~ a frequency at which data is read from the receive buffer.
27. (currently amended) The system of claim 25, wherein the rate control module regulates the amount of space available in the receive buffer by varying ~~[[the]]~~ an amount of data read during each read from the receive buffer.
28. (original) The system of claim 25, wherein the rate control module operates above a TCP layer and communicates with the TCP layer via a standard TCP application programming interface.
29. (original) The system of claim 28, wherein the rate control module operates between the TCP layer and an FTP/HTTP layer
30. (currently amended) The system of claim 28, wherein the rate control module is integrated into ~~[[a]]~~ an FTP/HTTP layer.
31. (original) The system of claim 25, wherein the average rate of transmission is reduced.
32. (currently amended) The system of claim 31, wherein the reduction in average rate of transmission is sufficient to reduce ~~[[the]]~~ an effect that a transmission has on ~~an other~~ another transmission.
33. (original) The system of claim 25, wherein the rate control module regulates the amount of space using a determined frequency of lost packets.
34. (cancelled)

35. (currently amended) The system of claim ~~[[34]]~~ 25, wherein the transfer ~~manager~~ includes management module further comprises at least a schedule/priority manager.
36. (new) The system of claim 25, wherein the priority of the data is associated with a transmission rate and proportion of utilized bandwidth.
37. (new) The system of claim 16, wherein the priority of the data is associated with a transmission rate and proportion of utilized bandwidth at which the data is delivered to the receive buffer.